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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,990	02/11/2004	Back-Won Lee	21C-0113	8230

23413 7590 03/20/2006

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EXAMINER

TANG, MINH NHUT

ART UNIT	PAPER NUMBER
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2829

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

A

Office Action Summary	Application No. 10/777,990	Applicant(s) LEE, BACK-WON	
	Examiner Minh N. Tang	Art Unit 2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 and 04 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 10-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Sawatsubashi et al. (U.S.P. 5,148,301).

As to claim 10, Sawatsubashi et al. disclose, in Figs. 3-5, a substrate for a display panel, comprising a lower substrate (101) having an inspection line (114) receiving a first inspection signal (control signals, image data signals) externally provided (see column 5, lines 12-16), a driving part (112, 113) formed at the lower substrate (101) and outputting a second inspection signal (gate signals, data signals) in response to the first inspection signal (control signals, image data signals) provided through the inspection line (114), and a pixel part (103, 104) being driven in response to the second inspection signal (gate signals, data signals); and an upper substrate (102) being coupled to the lower substrate (101).

As to claim 11, Sawatsubashi et al. disclose in Fig. 5, the inspection line (114) comprises a plurality of input lines (also called 114) spaced apart from each other in a predetermined distance; and a connecting line (115) electrically connected between the input lines (114).

As to claim 12, Sawatsubashi et al. disclose in Figs. 3-5, end portions of the input lines (114) are disposed on an edge portion of the lower substrate (101), and a connecting line (115) electrically connected between the end portions of the input lines (114) is disposed on the edge portion of the lower substrate (101).

As to claim 13, Sawatsubashi et al. disclose in Figs. 3-5, the lower substrate (101) is partially grinded, the end portions of the input lines (114) disposed on the edge portion and a portion of the connecting line (115) disposed on the edge portion are removed while the lower substrate (101) is grinded (see Fig. 4).

As to claim 14, Sawatsubashi et al. disclose in Figs. 3-5, the input lines (114) comprise a start signal input line, a clock input line and a driving voltage input line.

As to claim 15, Sawatsubashi et al. disclose in Figs. 3-5, the driving voltage input line has a width wider than those of the start signal input line and clock input line.

As to claim 16, Sawatsubashi et al. disclose in Figs. 3-5, the driving voltage input line receives a first inspection signal (control signals, image data signals) externally provided, and provides the first inspection signal to the inspection line (114).

As to claim 17, Sawatsubashi et al. disclose in Figs. 3-5, a liquid crystal layer (109) disposed between the lower substrate (101) and the upper substrate (102).

As to claim 18, Sawatsubashi et al. disclose, in Figs. 3-5, a method of manufacturing a display panel, comprising fabricating a substrate (101, 102) for a display panel, the substrate (101, 102) having a lower substrate (101) and an upper substrate (102) coupled to the lower substrate (101), the lower substrate (101) having an inspection line (114) receiving a first inspection signal (control signals, image data

signals) externally provided (see column 5, lines 12-16), a driving part (112, 113) formed at the lower substrate (101) outputting a second inspection signal (gate signals, data signals) in response to the first inspection signal (control signals, image data signals) provided through the inspection line (114), and a pixel part (103, 104) being driven in response to the second inspection signal (gate signals, data signals); providing the first inspection signal to the inspection line (114) to inspect the driving part (112, 113) and pixel part (103, 104); and insulating the inspection line (114) from an input line to complete the display panel.

As to claim 19, Sawatsubashi et al. disclose in Figs. 3-5, fabricating a mother substrate (also called 101) for the lower substrate (101) having an inspecting pad part (115) extended from the inspection line (114); providing the first inspection signal (control signals, image data signals) to the inspecting pad part (115) to inspect the mother substrate (101) for the lower substrate (101); fabricating a mother substrate (also called 102) for the upper substrate (102); combining the mother substrate (101) for the lower substrate (101) with the mother substrate (102) for the upper substrate (102); and cutting the combined substrate to complete the substrate for the display panel.

As to claim 20, Sawatsubashi et al. disclose in Figs. 3-5, the inspection line (114) is removed by grinding an edge of the substrate (see Fig. 4) for the display panel.

Response to Arguments

3. Applicant's arguments with respect to claims 10-20, filed on December 16, 2005, have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Kobayashi et al. 6,411,359 Liquid Crystal Display Device Having Smaller
Frame Area.


Ohgiichi et al. 6,750,926 Liquid Crystal Display Device And
Manufacturing Method Thereof.

Communication

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh N. Tang whose telephone number is (571) 272-1971. The examiner can normally be reached on M-F (7:00-3:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael M. Fahmy or Robert Pascal can be reached on (571) 272-1705 or (571) 272-1769, respectively. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


MINH NHUT TANG
PRIMARY EXAMINER
3/15/06